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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,047	03/24/2005	Kouji Kitahata	AI 376NP	1776
23995	7590	10/26/2007	EXAMINER	
RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			GOLOBOY, JAMES C	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,047	Applicant(s) KITAHATA ET AL.	
	Examiner James Goloboy	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/24/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 3-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 10/593,820. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 5 of the '820 application recites a lubricant composition containing a thickener and buffer particles with an average diameter of between 50 and 300 μm , meeting the limitations of claim 1 of the current application. Claim 6 of the '820 application recites a ratio of buffer particles to lubricant meeting the limitations of claim 5

Art Unit: 1797

of the current application. Claim 7 of the '820 application recites a lubricating base oil meeting the limitations of claim 7 of the current application. Claims 8-9 of the '820 application recite a speed reduction gear and power steering apparatus containing the lubricant, as in claims 8-9 of the current application. The differences between the claims of the '820 application and the claims of the current application is that the '820 application does not disclose the specific types of particles used as buffer particles, and does not disclose adding the particles to grease.

Applicant's attention is drawn to M.P.E.P. § 804 where it is disclosed that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F. 2d 438, 164 USPQ 619, 622 (CCPA 1970). In this case, Examples 1-3 of the specification of the '820 application, use polyurethane resin, meeting the limitations of claims 3-4 of the current application, and the greases prepared in the examples meet the limitations of claim 6 of the current application.

It would have been obvious to one of ordinary skill in the art to use polyurethane resin as the buffer particles in the composition of the '820 application, as the examples provided in the application teach that it is a suitable buffer particle for use in a noise-reducing lubricant composition.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 11/081,876. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 3 of the '876 application discloses a lubricant composition comprising polyurethane buffer particles, as in claims 1 and 3-4 of the current application. Claims 4-5 of the '876 application disclose that the lubricants can meet the limitations of claims 6-7 of the current application, and claims 7-8 of the '876 application disclose a speed reduction gear and power steering apparatus containing the lubricant, as in claims 8-9 of the current application. Claim 4 of the '876 application recites spherical polyurethane particles, as in claim 2 of the current application. The differences between the claims of the '876 application and the currently presented claims are that the claims of the '876 application do not disclose the particle size of the polyurethane particles or mixing ratio between the buffer particles and the lubricant.

Applicant's attention is drawn to M.P.E.P. § 804 where it is disclosed that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F. 2d 438, 164 USPQ 619, 622 (CCPA 1970). Page 17 lines 7-8 of the '876 application teaches that the average particle diameter of the polyurethane particles is preferably between 50 and 300 μm , as in claim 1 of the current application. From page 20 line 24 through page 21 line 1 of the specification of the '876 application, it is taught

Art Unit: 1797

that the buffer particles are preferably mixed with the lubricant in a ratio matching that of claim 5 of the current application.

It would have been obvious to one of ordinary skill in the art to use polyurethane particles with an average diameter of between 50 and 300 μm and to mix them with the lubricant in a ratio of from 20 to 300 parts by weight per 100 parts by weight of the lubricant, as the '876 application teaches that it is preferable to do so.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobs (U.S. Pat. No. 5,792,727).

In the abstract, Jacobs describes a lubricant composition containing spherical particles of a ceramic material. In column 3 lines 8-10 Jacobs discloses that Zeeospheres are a suitable ceramic material, and in the table from column 22-29 discloses Zeeospheres type 800, with an average particle size of 55.9 μm . A lubricant

composition containing Zeeospheres type 800 as the ceramic material therefore meets the limitations of claims 1-2.

In Example 1 (column 5 lines 51-60), Jacobs teaches that the Zeeospheres can be added to an NLGI No. 2 lithium grease in a ratio of 131 parts by weight to 100 parts by weight of grease, meeting the limitations of claims 5-6.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dodd (U.S. Pat. No. 4,123,367).

From column 2 line 63 through column 4 line 4, Dodd discloses a composition of drilling fluid comprising spherical glass beads. Drilling fluid is a lubricant and can have a lubricating oil base (column 4 line 2). In column 5 line 58-59, Dodd teaches that the

drilling fluid has a viscosity of 52 centipoise. While Dodd does not teach the specific gravity of the drilling fluid, it is clear that the kinematic viscosity of the fluid will fall within the range recited in claim 7. The difference between Dodd and the currently presented claims is that Dodd does not disclose beads having a particle size of between 50 and 300 μm .

In column 3 lines 63-67, Dodd teaches that the glass beads have a particle size of 44 to 88 μm , overlapping the range recited in claim 1. While the range of particle sizes taught by Dodd does not anticipate the ranges recited in claim 1, it does overlap the ranges and therefore renders them obvious. See MPEP 2144.05(I): "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976);" Claims 1-2 and 7 are therefore rendered obvious by Dodd.

9. Claims 1, 3-4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baum (U.S. PG Pub. No. 2002/039973).

In paragraph 10-12, Baum discloses a method of preparing a grease where the thickener particles are sheared to a particle size of below 500 microns. In paragraph 15 Baum teaches that the thickener particles can be urethane compounds, as recited in claim 4. Urethane compounds have a Young's modulus falling within the range recited in claim 3. In paragraph 14 Baum teaches that the lubricating oil typically has a viscosity of between 10 and 200 cSt at 40° C, within the range recited in claim 7. The difference between Baum and the currently presented claims is that Baum does not disclose urethane particles having a particle size of between 50 and 300 μm .

In paragraph 11, Baum teaches that the thickener particles are sheared to a particle size of below 500 microns, encompassing the range recited in claim 1. . See MPEP 2144.05(I): "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976);" Claims 1 and 3-4 are therefore rendered obvious by Baum.

10. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner (U.S. Pat. No. 6,250,420) in view of Baum.

In column 1 lines 6-7, Brenner discloses an electrically assisted power steering system, as recited in claim 9. In column 4 lines 3-16, Brenner teaches that the power steering system comprises a speed-reduction gear, which contains an externally toothed gear wheel and an internally toothed ring gear, meeting the limitations of the two gears recited in claim 8. Brenner does not disclose a lubricant between the gears.

The discussion of Baum in paragraph 9 above is incorporated here by reference. Baum discloses a grease meeting the limitations of claim 1. It would have been obvious to use the grease of Baum to lubricate the speed reduction gear of Brenner, meeting the limitations of claims 8-9, in order to reduce wear on the gears, and further to reduce noise, as taught in paragraph 1 of Baum.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is 571-272-2476. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCG



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